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Pre-History and History of legumes to 1900

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Legumes are thought to be one of the earliest human-domesticated plants. We know from Bible that Lentils were also the ingredient of the cultivation and food of ancient Egypt. In Turkey, fossilized seeds of pea, lentils and other leguminous plants have been discovered from the fire places of Neolithic age, approximately 7000 to 8000 years B. C. ago. The human population inhabiting around the lakes during 4000-5000 B.C. in Switzerland, grew peas and a dwarf field bean. Farmers in China started to cultivate soy bean during 2000-3000 B.C. These crops were introduced and then started to cultivate in America and Asia nearly 3,000 years ago.

For soil improvement Romans used used legumes in pastures dating 37 B. C. [1]. In Finland, pea cultivation has been documented since the 17th century it was common in the southwest, where soils contained enough clay and arable fields were available, and spread slowly throughout the country [2]. In Sub-Saharan Africa regarding the trends in production, distribution, trade of legumes, the approximate used area for total harvesting of all the leguminous crops was 20 million ha in 2006-2008, which is 28% of total area used for cultivating crops worldwide. From this area, 54% of the area was used for cow peas, 28% for dry beans and 18% for all other lentils. West and Central Africa produced estimated 2.6 million tons of cowpeas on 7.8 million ha per annum in 1990s, which was about 69% of the global production and harvesting [3].

There is an estimated 10% of pulse contributions to protein intake and the top 16 developing countries out of 28, that are producing these crops, are from Sub-Saharan Africa. The top 5 countries in this list (Braudi, Rwanda, Uganda, Kenya, Comoros) are also in Sub-Saharan Africa. For the production of lentils in Sub- Saharan Africa, the area specified for this purpose is 17% while it is 10% in rest of the world [4]. The land required for the cultivation of legumes is of poor quality, meaning that there are no strict criteria for land and can be grown easily on any type of land. On the other hand, cereals such as wheat, maize, rice, barley requires fertilized land, temperature and humidity-controlled conditions for proper growth and they are also very sensitive crops. Legumes can be grown in areas with scarcity of water and are resistant to tough weather and land conditions. Unfortunately, the pulses and legumes do not get investment, resources and the Governments in most of the countries do not pay much attention to these crops as they are mostly consumed as secondary food while cereals are mostly assumed as priority attention crop. Cereals are considered as food security crops and policies are devised for their growth and protection [5].

The proportions of cultivated legumes have great differences across the world. The cultivation of legumes uses 16% of total cultivated land globally and the soybean crop among these is the most important crop in America in terms of food choice, trade and financial impact. In Europe the area of grain legumes is about 4 million, in this area 8 million t legume seeds are

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produced. Pea is the dominant legume seed in Europe, which is cultivated on about 1 million ha [6]. Regular consumption o legumes are highly recommended due to their nutritional value among the food stuffs. In Middle Ages, they were one of the most important sources of energy (starch) and protein in the human diet. But now legumes have been replaced by potatoes, food of animal origin or cereals by their role [7]. However, attitudes towards legumes have been improving for some time now, and they are no longer consistently viewed as old-fashioned. The reasons for this are health benefits of legumes are being increasingly recognized and acknowledged [8].

REFERENCES

[1] Allen ON, Allen EK. The Leguminosae, a source book of characteristics, uses, and nodulation. Univ of Wisconsin Press; 1981.
[2] Grotenfelt, G. 1992. Suomalainen peltokasviviljeyLys. IV. Eri peltokasvein viljelys. Otava, Helsikni. 517 p. (In Finnish).
[3] Langyintuo AS, Lowenberg-DeBoer J, Faye M, Lambert D, Ibro G, Moussa B, Kergna A, Kushwaha S, Musa S, Ntoukam G. Cowpea supply and demand in West and Central Africa. Field crops research. 2003 May 1;82(2-3):215-31.
[4] Akibode CS, Maredia MK. Global and regional trends in production, trade and consumption of food legume crops. 2012 Oct 15.
[5] Byerlee D, White R. Agricultural systems intensification and diversification through food legumes: technological and policy options. InLinking research and marketing opportunities for pulses in the 21st century 2000 (pp. 31-46). Springer, Dordrecht.
[6] Hedley CL, editor. Carbohydrates in grain legume seeds: improving nutritional quality and agronomic characteristics. CABI; 2001.
[7] Deutsche Gesellschaft für Ernährung (Hg). 13. Ernährungsbericht. Köllen Druck und Verlag GmbH, Bonn (2016)
[8] Sirtori CR, Triolo M, Bosisio R, Bondioli A, Calabresi L, De Vergori V, Gomaraschi M, Mombelli G, Pazzucconi F, Zacherl C, Arnoldi A. Hypocholesterolaemic effects of lupin protein and pea protein/fibre combinations in moderately hypercholesterolaemic individuals. British Journal of Nutrition. 2012 Apr;107(8):1176-83